



Appl. No. 10/686,529  
Atty. Dkt.: 1579-863  
REPLACEMENT SHEET  
1 of 8

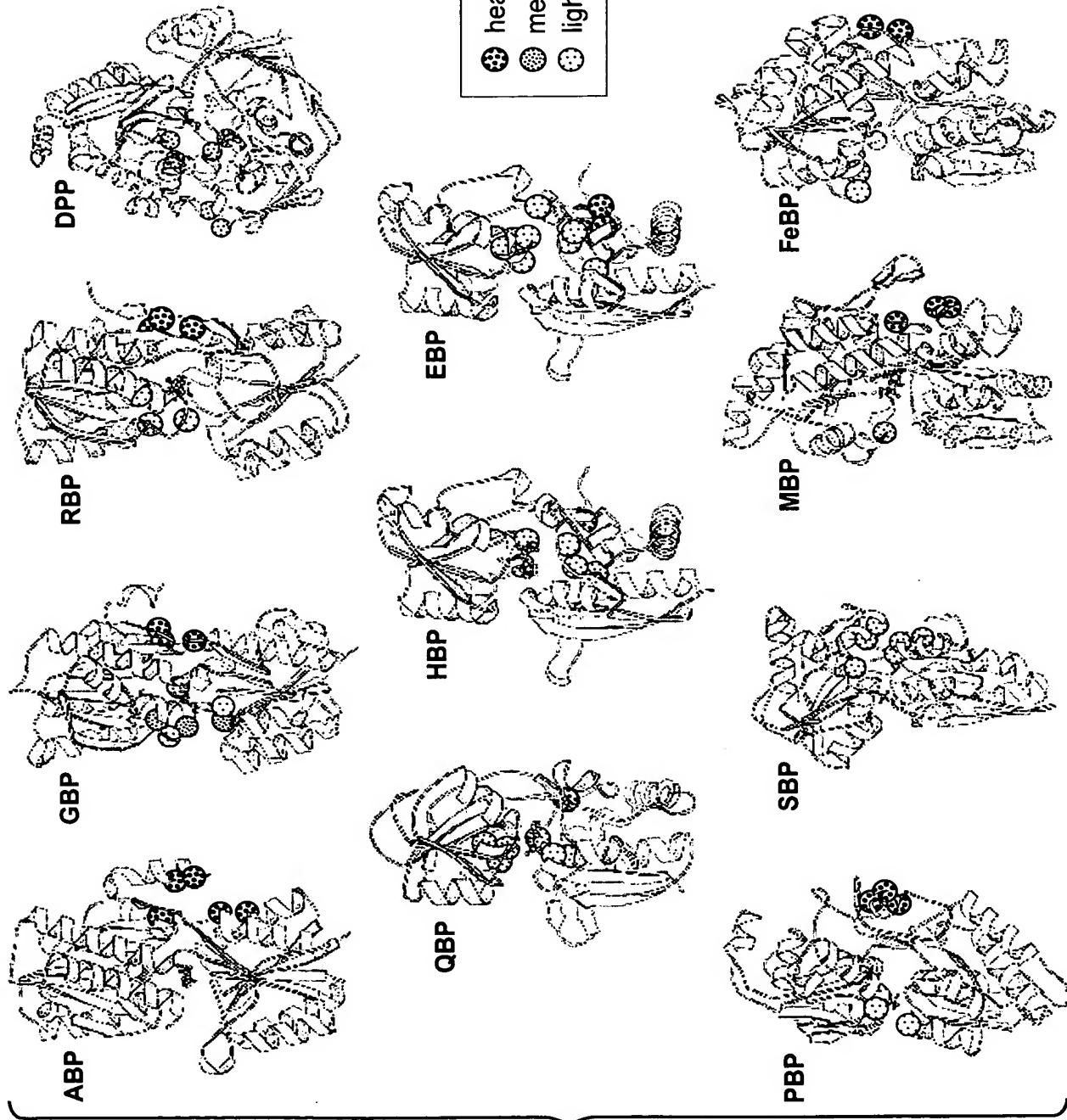
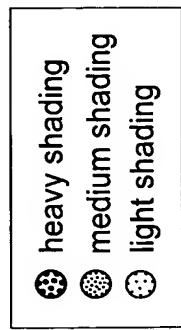


Fig. 1

9ln BP ----- ADKKLUVVATD TAFVPEEFKQGD - KYVGFDV DLWAIAINKELK-  
 his BP ----- AIPONIRIG'D PTYAFFESKNQSQGELVGFDI DLAKELECKRIN-  
 YBEJ MAGSTLDKIAKNGVIVVGH R ESSVPFSYYUNQKVVGYSQ DYSNAIVEAVKKKLNKPDHQ  
 p p a

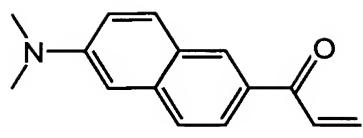
47 67 87 107 127  
 LD YELKPMDFSGIIIPALQTKNV DLALAGITITDERKKAIDFS  
 CTFVENPLDALIPISLKAKKI DAIMSSLSITEKROQEIAFT  
 DFECGSTNNVERQKQAAPS

147 166 186 206 226  
 DGYYKSGLLVMVKANNNDVK SVKDLDGKVVAWKS GTGSWD YAKANIKTK - - - - - DLIRQFPNIID N--AYMELGTNRADAVLIJD PNILY - FIKTAGNQFKAVG  
 his BP DKLXAADSRLVAKNSDIOP TVESLKGKRVGVI.QGTTQET FGNEHWAPKGIEIVSYQGQD N--1YSDLTAGRIDAAFQDE VAASEGFLKQPVGKDYKF GG  
 YBEJ DTIFVVGTTRLLT KGGD - 1K DFANLKDKAVVVTS GTTSEV LLNKLNEEQKMNMRIISAKD HGDSFRTLESGRAVAFMMDD ALLAGERAKAKKP DNWEIVG  
 pp pp

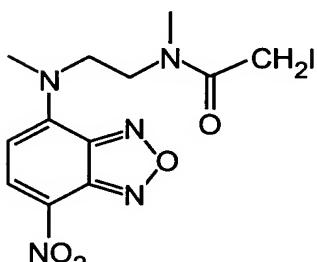
147 241 261 281 301  
 a a

9ln BP DSLEAQQYG - - - - - IAFPKG SDELRDKVNGAI.KTLRENGT' YNEIYKKWFGEPEK-----  
 his BP PSVKDEKLFGVGTGMGLRK E DNELREALNKAFAEMRADGT YEKLAKKYFDFDVYGG-----  
 YBEJ KPOSQEAYG - - - - - CMLRKD DPQFKKLMDDTIAQVQTSGE AEKWFDKWFKNPIPPKNLN M NFELSDEMKA LPKEPNDKAL N  
 PPP

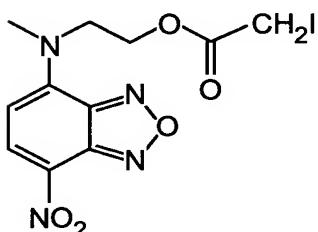
*Fig. 2*



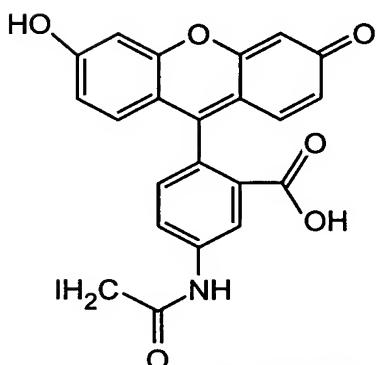
Acrylodan



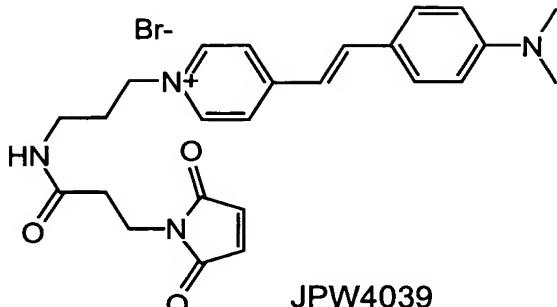
NBD



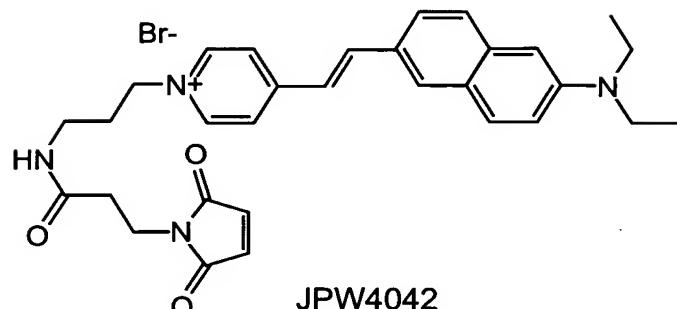
NBDE



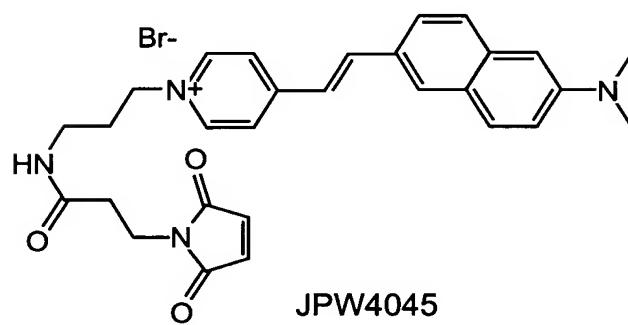
Fluorescein



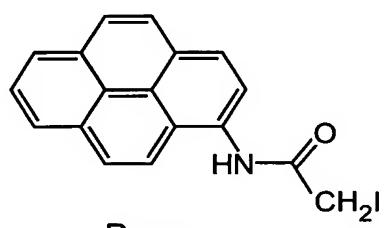
JPW4039



JPW4042

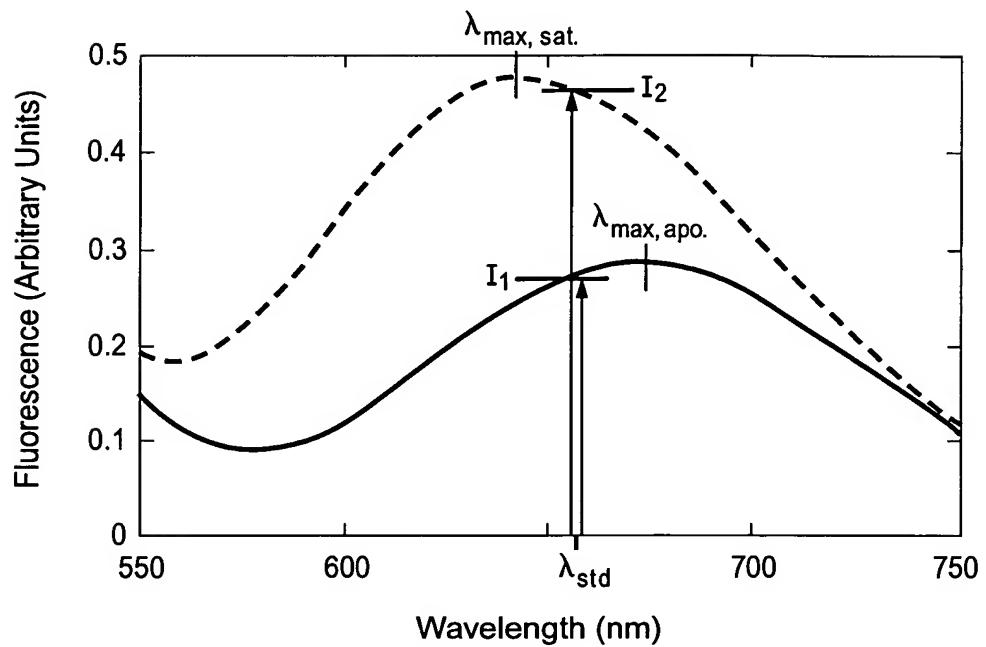


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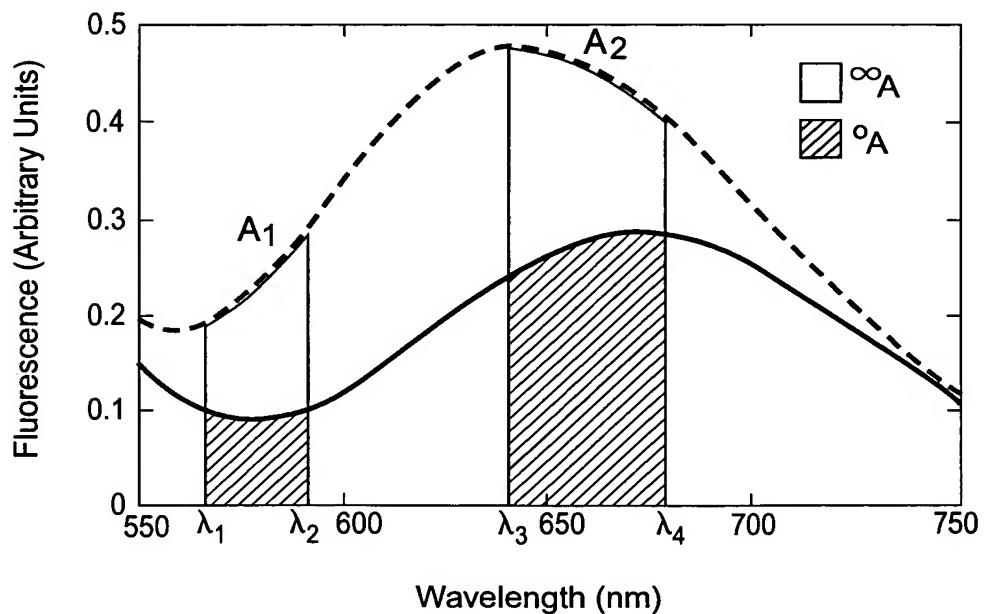


Pyrene

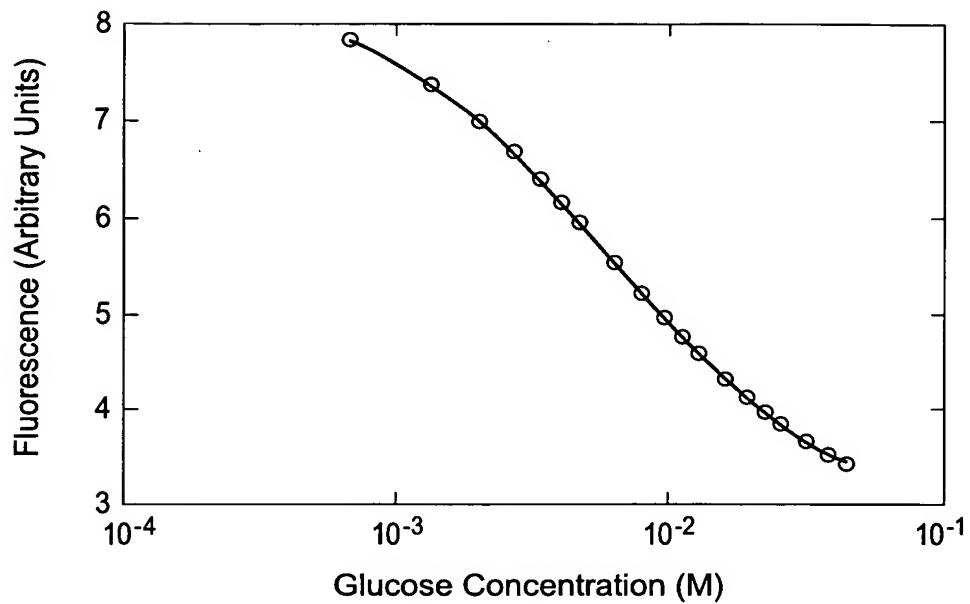
Fig. 3



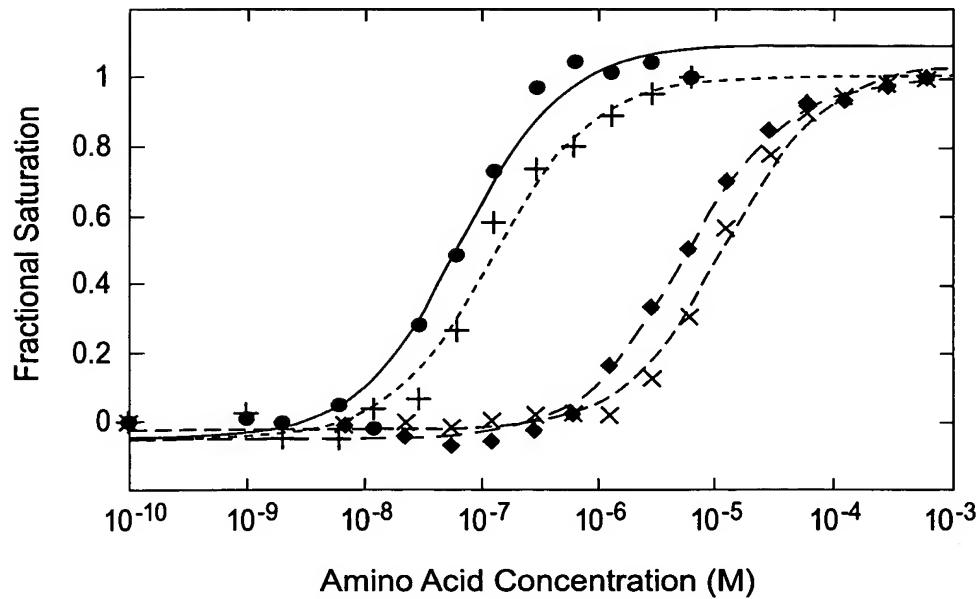
*Fig. 4A*



*Fig. 4B*



*Fig. 5A*



*Fig. 5B*

Fig. 6A

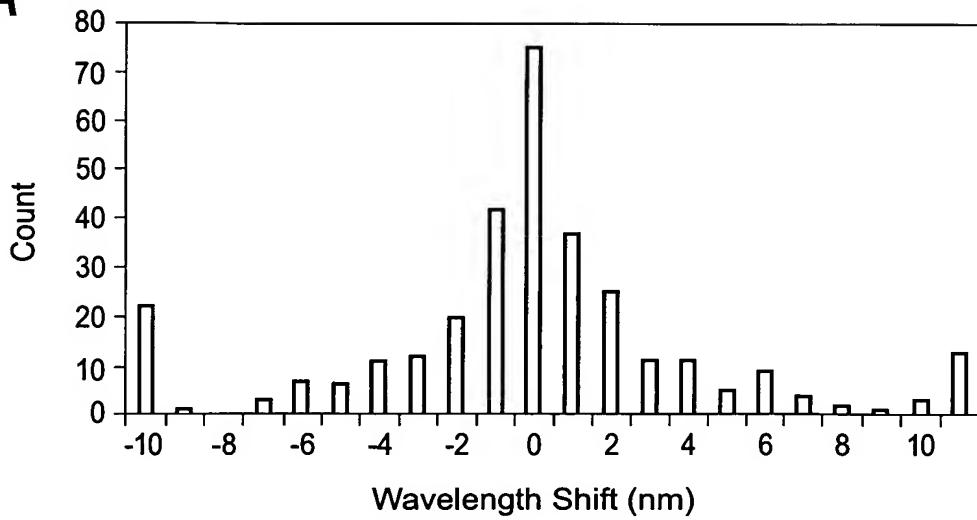


Fig. 6B

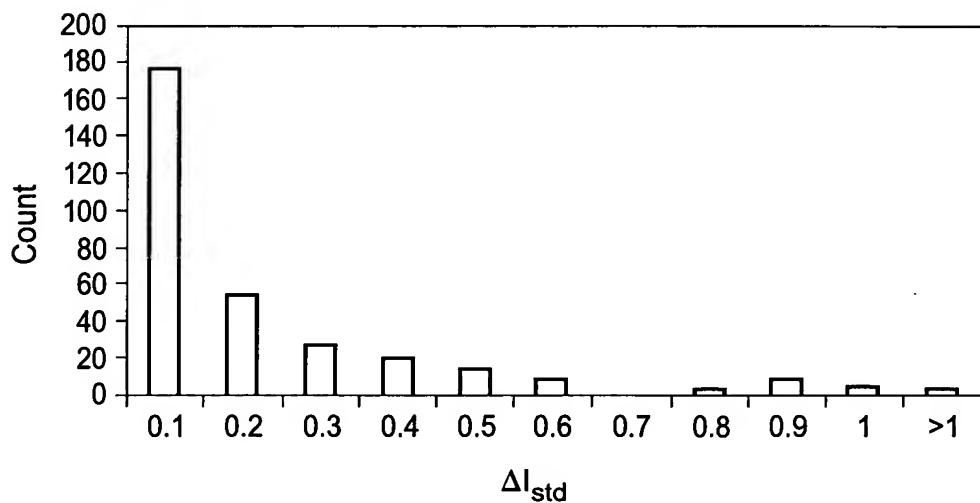
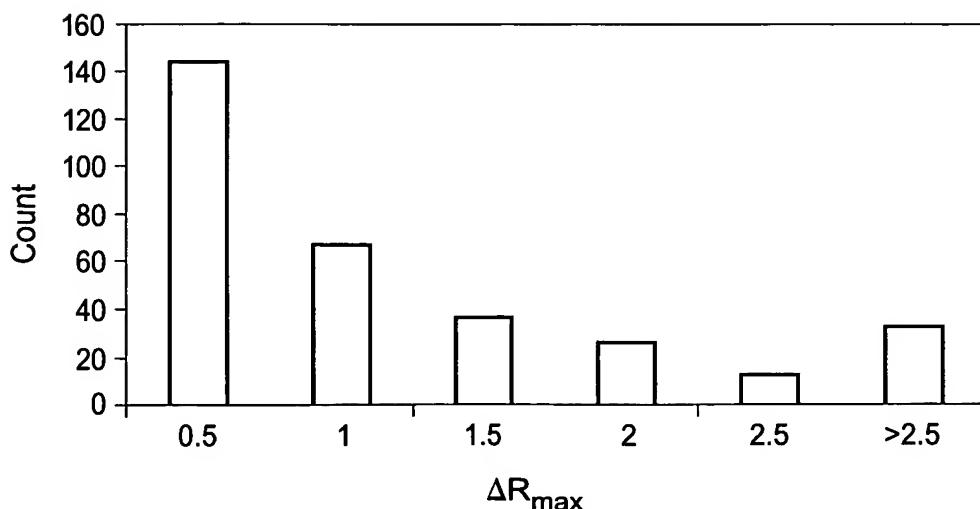


Fig. 6C



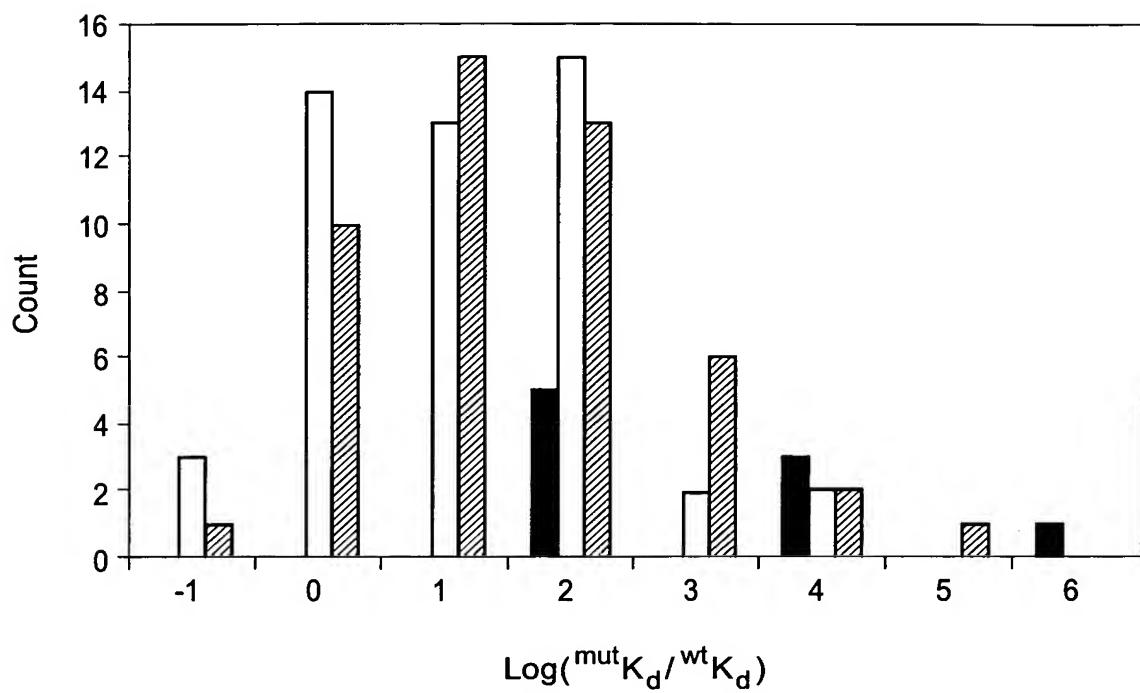
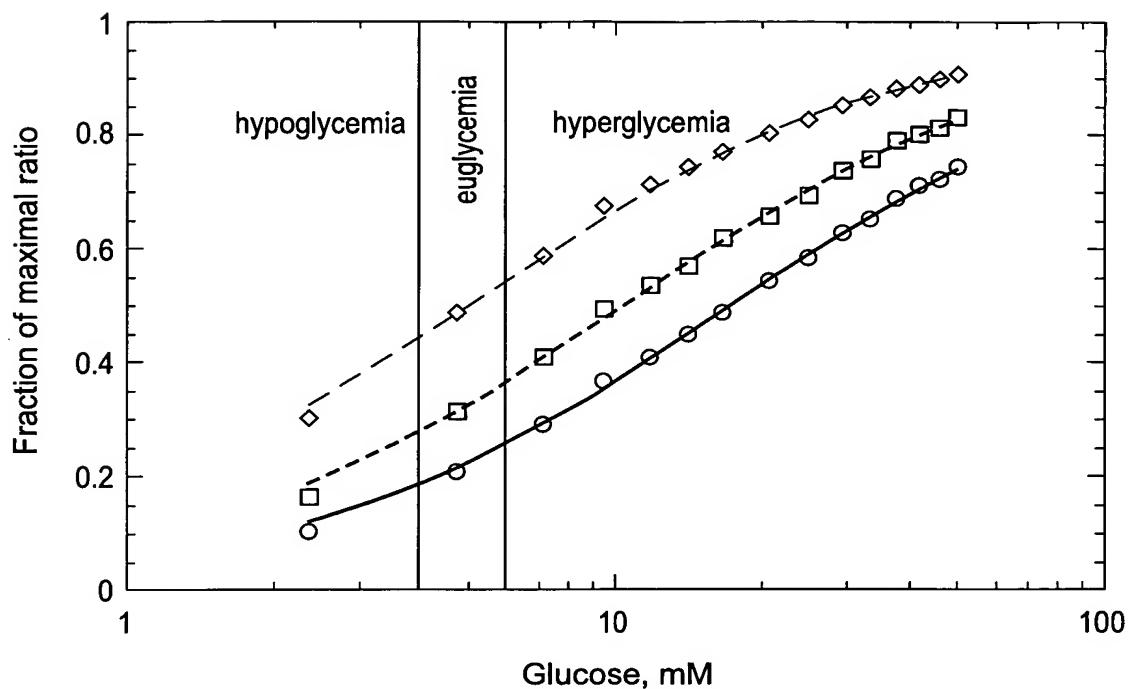
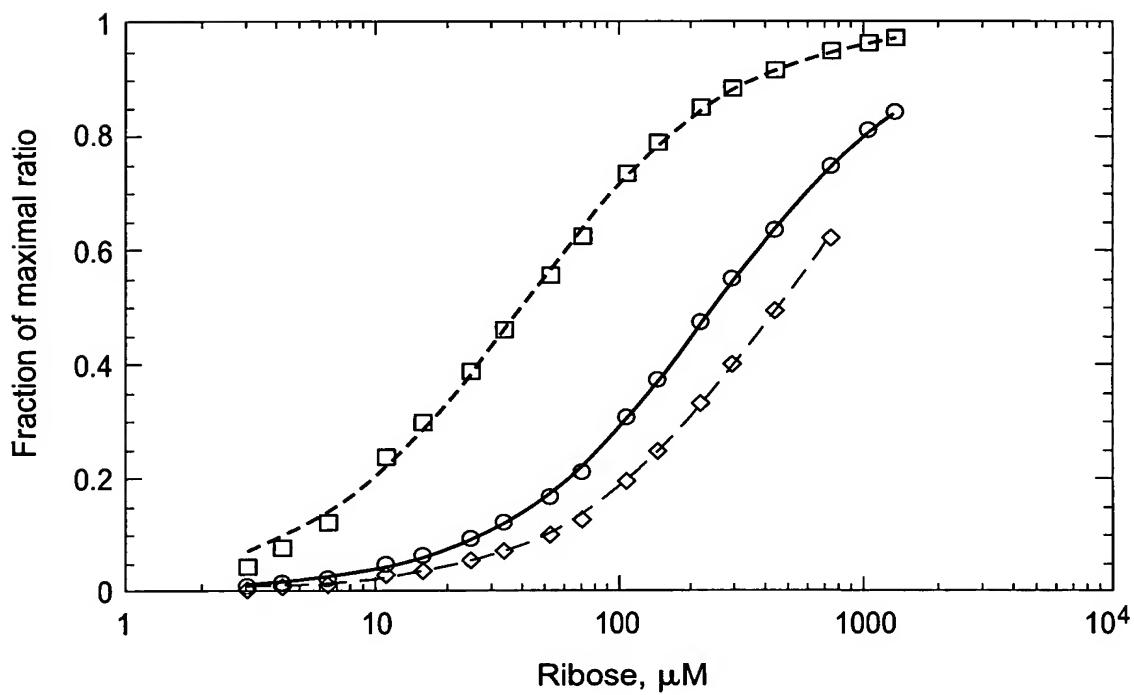


Fig. 7



*Fig. 8A*



*Fig. 8B*